13 September, 2010

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: TV White Spaces
ET Docket Nos. 04-186 and 02-380

Dear Ms. Dortch:

My company, North Branch Networks, LLC, provides fixed wireless broadband service in rural Vermont. We rely primarily on unlicensed spectrum to deliver broadband services to consumers that have few broadband choices. We built our network from scratch using devices authorized under Part 15 rules the FCC adopted to open up 900 MHz, 2.4 GHz and 5 GHz spectrum for unlicensed broadband devices. Thanks to the Commission's initiatives, consumers in the rural mountain towns we cover now have a broadband option. Owing to the nature of our area, the 900MHz spectrum has been invaluable and still provides service to most of our customers.

NBN is very interested in utilizing television white spaces so that we can expand and improve service. In the densely forested areas that typify our service footprint we quickly run out of 900 MHz channel options for last-mile service and generally use up the available higher frequency spectrum on line-of-sight and near line-of-sight backhaul point-to-point links. The TV white spaces at slightly lower frequency should have even greater ability to penetrate foliage than the 900MHz spectrum and thus will be invaluable for rural last-mile coverage. Technical advances are rapidly improving spectral efficiency in higher frequencies; we have been told by some equipment vendors that they have been waiting to develop similar equipment in the sub 1 GHz range for availability of the TV white spaces. We are eager to see this technology, and committed to deploying as soon as equipment for point-to-multipoint service is commercially available.

I am pleased that the FCC will be acting on TV white space petitions for reconsideration in the near future. There are several proposals that would help us to deploy service:

First, the FCC should allow WISPs to operate using base station antennas mounted higher than 30 meters, and we should be allowed to install customer antennas (CPE) at heights below 10

meters. If we could increase our base station antenna height to 100 meters, we could cover three times more area with a base station and reduce our equipment, tower acquisition and tower lease fees by a large amount – an amount that could be the difference between deploying or not deploying in an area. We support the WISPA and Motorola proposals to increase base station height. If minimum CPE height restrictions were removed, we would not have to put tall masts on every residence and we would be able to provide service at significantly lower cost.

Second, we believe we should be allowed to operate with power in excess of 4 Watts EIRP in rural areas. As is the case with tower height, operating with higher power will give us a greater coverage area and we will not need to spend as much money on infrastructure.

Third, we are very concerned about a proposal made by FiberTower and others to license white space spectrum for point-to-point wireless backhaul. Not only would adopting this proposal take six channels (36 MHz) and perhaps more channels away from us, but WISPs also would have to protect these licensed links. Moreover, channels and areas far beyond the links would be blocked because the signals from the licensed links would overshoot the path and the endpoints. This is due to the low-coast, low-gain antennas FiberTower wants to use. We also would not deploy if a licensed point-to-point user could come along later and put us out of business with a licensed link. We support the views expressed by WISPA in their September 8 letter and ask the FCC to reject the FiberTower proposal.

North Branch Networks has grown out of the commitment to provide universal, affordable broadband service where there is no other option, like most of the WISP community. We ask you to help us with the appropriate tools to continue that job.

Sincerely,

Jeremy Grip
Principal
North Branch Networks, LLC